# Senate



General Assembly

File No. 212

January Session, 2015

Substitute Senate Bill No. 957

Senate, March 25, 2015

The Committee on Commerce reported through SEN. HARTLEY, J. of the 15th Dist., Chairperson of the Committee on the part of the Senate, that the substitute bill ought to pass.

# AN ACT CONCERNING REVISIONS TO THE REGENERATIVE MEDICINE RESEARCH FUND AND THE CONNECTICUT BIOSCIENCE INNOVATION FUND, AND THE CONSOLIDATION OF CERTAIN FUNDS OF CONNECTICUT INNOVATIONS, INCORPORATED.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

- 1 Section 1. Subsection (a) of section 32-41jj of the general statutes is
- 2 repealed and the following is substituted in lieu thereof (Effective July
- 3 1, 2015):
- 4 (a) As used in sections 32-41jj to 32-41mm, inclusive, <u>as amended by</u>
- 5 <u>this act</u>, and section 4-28e:
- 6 (1) "Embryonic stem cell research oversight committee" means a
- 7 committee established in accordance with the National Academies'
- 8 Guidelines for Human Embryonic Stem Cell Research, as amended
- 9 from time to time.
- 10 (2) "Cloning of a human being" means inducing or permitting a
- 11 replicate of a living human being's complete set of genetic material to

- 12 develop after gastrulation commences.
- 13 (3) "Gastrulation" means the process immediately following the
- 14 blastula state when the hollow ball of cells representing the early
- 15 embryo undergoes a complex and coordinated series of movements
- 16 that results in the formation of the three primary germ layers, the
- 17 ectoderm, mesoderm and endoderm.
- 18 (4) "Embryonic stem cells" means cells created through the joining of
- 19 a human egg and sperm or through nuclear transfer that are
- 20 sufficiently undifferentiated such that they cannot be identified as
- 21 components of any specialized cell type.
- 22 (5) "Nuclear transfer" means the replacement of the nucleus of a
- 23 human egg with a nucleus from another human cell.
- 24 (6) "Eligible institution" means (A) a nonprofit, tax-exempt academic
- 25 institution of higher education, (B) a hospital that conducts biomedical
- 26 research, or (C) any entity that conducts biomedical research or
- 27 regenerative medicine research.
- 28 (7) "Regenerative medicine" means the process of creating living,
- 29 functional tissue to repair or replace tissue or organ function lost due
- 30 to aging, disease, damage or congenital defect. Regenerative medicine
- 31 includes basic stem cell research.
- 32 (8) "Financial assistance" means any and all forms of grants,
- 33 extensions of credit, loans or loan guarantees, equity investments or
- 34 <u>other forms of financing.</u>
- Sec. 2. Section 32-41kk of the general statutes is repealed and the
- 36 following is substituted in lieu thereof (*Effective July 1, 2015*):
- 37 (a) There is established the "Regenerative Medicine Research Fund",
- 38 which shall be a separate, nonlapsing account within the General
- 39 Fund. The fund may contain any moneys required or permitted by law
- 40 to be deposited in the fund and any funds received from any public or
- 41 private contributions, gifts, grants, donations, bequests or devises to

42 the fund. The chief executive officer of Connecticut Innovations, 43 Incorporated, (1) shall [make grants-in-aid] award financial assistance 44 from the fund in accordance with the provisions of subsection (b) of 45 this section, and (2) may enter into agreements with other entities, 46 including, but not limited to, the government of any state or foreign 47 country for the purpose of advancing research collaboration 48 opportunities for recipients of [grants-in-aid] financial assistance under 49 this section.

(b) The Regenerative Medicine Research Advisory Committee established pursuant to section 32-41ll, as amended by this act, shall develop an application for [grants-in-aid] financial assistance under this section for the purpose of conducting regenerative medicine research and may receive applications from eligible institutions for such [grants-in-aid] <u>financial assistance</u>. The Regenerative Medicine Research Advisory Committee shall require any applicant for [a grantin-aid] financial assistance under this section to conduct regenerative medicine research to submit (1) a complete description of the applicant's organization, (2) the applicant's plans for regenerative medicine research and proposed funding for such research from sources other than the state, and (3) proposed arrangements concerning financial benefits to the state as a result of any patent, royalty payment or similar rights developing from any proposed research made possible by the awarding of such [grant-in-aid] financial assistance. The Regenerative Medicine Research Advisory Committee shall direct the chief executive officer of Connecticut Innovations, Incorporated, with respect to the awarding of such [grants-in-aid] <u>financial assistance</u> after considering recommendations from [the Regenerative Medicine Research Peer Review Committee established pursuant to section 32-41mm] the peer review panel selected by said advisory committee pursuant to section 32-41mm, as amended by this act.

(c) Commencing with the fiscal year ending June 30, 2006, and for each of the thirteen consecutive fiscal years thereafter, until the fiscal year ending June 30, 2019, not less than ten million dollars shall be

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available from the Regenerative Medicine Research Fund for [grants-in-aid] <u>financial assistance</u> to eligible institutions for the purpose of conducting regenerative medicine research. Any balance of such amount not used for such [grants-in-aid] <u>financial assistance</u> during a fiscal year shall be carried forward for the fiscal year next succeeding for such [grants-in-aid] <u>financial assistance</u>.

- Sec. 3. Section 32-41*ll* of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2015*):
- 84 (a) (1) There is established a Regenerative Medicine Research 85 Advisory Committee. The committee shall consist 86 Commissioner of Public Health, or the commissioner's designee, the 87 chief executive officer of Connecticut Innovations, Incorporated, or the 88 chief executive officer's designee, and eight members who shall be 89 appointed as follows: Two by the Governor, one of whom shall have 90 background and experience in stem cell or regenerative medicine 91 research and one of whom shall have background and experience in 92 business or financial investments; one each by the president pro 93 tempore of the Senate and the speaker of the House of Representatives, 94 who shall have background and experience in private sector 95 regenerative medicine research and development; one each by the 96 majority leaders of the Senate and House of Representatives, who shall 97 be academic researchers specializing in regenerative medicine 98 research; one by the minority leader of the Senate, who shall have 99 background and experience in either private or public sector 100 regenerative medicine research and development or related research 101 fields, including, but not limited to, embryology, genetics or cellular 102 biology; and one by the minority leader of the House of 103 Representatives, who shall have background and experience in the 104 field of bioethics. Members shall serve for a term of four years 105 commencing on October first, except that members first appointed by 106 the Governor and the majority leaders of the Senate and House of 107 Representatives shall serve for a term of two years. No member may 108 serve for more than two consecutive four-year terms. All initial 109 appointments to the committee shall be made by October 1, 2005. Any

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vacancy shall be filled by the appointing authority.

111 (2) The Regenerative Medicine Research Advisory Committee shall 112 include eight additional members who shall be appointed as follows: 113 Two by the Governor, who shall have backgrounds and experience in 114 business or financial investments; one each by the president pro 115 tempore of the Senate and the speaker of the House of Representatives, 116 who shall have background and experience in private sector 117 regenerative medicine research and development; one each by the 118 majority leaders of the Senate and House of Representatives, who shall 119 be academic researchers specializing in regenerative medicine 120 research; one by the minority leader of the Senate, who shall have 121 background and experience in either private or public sector 122 regenerative medicine research and development or related research 123 fields, including, but not limited to, embryology, genetics or cellular 124 biology; and one by the minority leader of the House of 125 Representatives, who shall have background and experience in 126 business, law or ethics. Members shall serve for a term of four years, 127 except that (A) members first appointed by the Governor and the 128 majority leaders of the Senate and House of Representatives pursuant 129 to this subdivision shall serve for a term of two years and three 130 months, and (B) members first appointed by the remaining appointing 131 authorities shall serve for a term of four years and three months. No 132 member appointed pursuant to this subdivision may serve for more 133 than two consecutive four-year terms. All initial appointments to the 134 committee pursuant to this subdivision shall be made by July 1, 2006. 135 Any vacancy shall be filled by the appointing authority.

- (b) The chief executive officer of Connecticut Innovations, Incorporated, or the chief executive officer's designee, shall serve as chairperson of the Regenerative Medicine Research Advisory Committee.
- (c) All members appointed to said advisory committee shall work to advance regenerative medicine research. Any member who fails to attend three consecutive meetings or who fails to attend fifty per cent

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of all meetings held during any calendar year shall be deemed to have resigned from said advisory committee.

- (d) Notwithstanding the provisions of any other law, it shall not constitute a conflict of interest for a trustee, director, partner, officer, stockholder, proprietor, counsel or employee of any eligible institution, or for any other individual with a financial interest in any eligible institution, to serve as a member of said advisory committee. All members shall be deemed public officials and shall adhere to the code of ethics for public officials set forth in chapter 10. Members may participate in the affairs of said advisory committee with respect to the review or consideration of [grant-in-aid] applications for financial assistance, including the approval or disapproval of such applications, except that no member shall participate in the affairs of said advisory committee with respect to the review or consideration of any [grant-inaid application for financial assistance filed by such member or by any eligible institution in which such member has a financial interest, or with whom such member engages in any business, employment, transaction or professional activity.
- (e) The Regenerative Medicine Research Advisory Committee shall develop, in consultation with Connecticut Innovations, (1)Incorporated, a donated funds program to encourage the development of funds other than state appropriations for regenerative medicine research in the state, (2) examine and identify specific ways to improve and promote for-profit and not-for-profit regenerative medicine research and research in related areas in the state, including, but not limited to, identifying both public and private funding sources for such research, maintaining existing regenerative medicine-related businesses, recruiting new regenerative medicine-related businesses to the state and recruiting scientists and researchers in such field to the state, (3) administer a regenerative medicine research [grant] assistance program that shall provide [grants-in-aid] financial assistance to eligible institutions for the advancement of regenerative medicine research in the state pursuant to section 32-41kk, as amended by this act, (4) monitor the regenerative medicine research conducted by

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177 eligible institutions that receive such [grants-in-aid] financial 178 assistance, and (5) prepare a comprehensive strategic plan for the 179 Regenerative Medicine Research Fund, established pursuant to section 180 32-41kk, as amended by this act, and [grants-in-aid made] financial 181 assistance awarded from said fund that shall include, but need not be 182 limited to, identification of specific methods or strategies to (A) 183 achieve the scientific and economic development objective of said 184 fund, (B) build innovation capacity, and (C) sustain investments of 185 moneys received by said fund.

- (f) Connecticut Innovations, Incorporated, shall serve as administrator of the Regenerative Medicine Research Fund and shall, in consultation with the Regenerative Medicine Research Advisory Committee: (1) Develop the application for the [grants-in-aid] <u>financial</u> assistance authorized under subsection (b) of section 32-41kk, as amended by this act; (2) review such applications; (3) review recommendations of the Regenerative Medicine Research Advisory Committee, established pursuant to section 32-41mm, as amended by this act; (4) prepare and execute any assistance agreements or other agreements in connection with the awarding of such [grants-in-aid] financial assistance; (5) develop performance metrics and systems to collect data from recipients of such [grants-in-aid] financial assistance; (6) collect information from such recipients concerning each recipient's employment statistics, business accomplishments and performance outcomes, peer review articles and papers published, partnerships and collaborations with other entities, licenses, patents and invention disclosures, scientific progress as it relates to the commercialization of intellectual property funded by such [grants-in-aid] financial assistance, efforts to commercialize such intellectual property, and other funds received for research; and (7) performing such other administrative duties as the Regenerative Medicine Research Advisory Committee deems necessary.
- Sec. 4. Section 32-41mm of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2015*):

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[(a) (1) There is established a Regenerative Medicine Research Peer Review Committee. Said peer review committee shall consist of five members.

- (2) On and before September 30, 2014, all members appointed by the Commissioner of Public Health to the committee shall (A) have demonstrated knowledge and understanding of the ethical and medical implications of regenerative medicine research or related research fields, including, but not limited to, embryology, genetics or cellular biology, (B) have practical research experience in regenerative medicine research or related research fields, including, but not limited to, embryology, genetics or cellular biology, and (C) work to advance regenerative medicine research. Members shall serve for a term of four years commencing on October first, except that three members first appointed by the Commissioner of Public Health shall serve for a term of two years. No member may serve for more than two consecutive four-year terms and no member may serve concurrently on the Regenerative Medicine Research Advisory Committee established pursuant to section 32-41ll. All initial appointments to said peer review committee shall be made by October 1, 2005. Any member who fails to attend three consecutive meetings or who fails to attend fifty per cent of all meetings held during any calendar year shall be deemed to have resigned from said peer review committee.
- (3) On and after October 1, 2014, each member appointed by the Commissioner of Public Health pursuant to subdivision (2) of this subsection may serve to the conclusion of his or her current term at which time members shall be appointed by the chief executive officer of Connecticut Innovations, Incorporated, as follows: Members appointed to said peer review committee shall: (A) Have demonstrated knowledge and understanding of the ethical and medical implications of regenerative medicine research or research in a related field, including, but not limited to, embryology, genetics or cellular biology; (B) have practical research experience in regenerative medicine research or research in a related field, including, but not limited to, embryology, genetics or cellular biology; and (C) work to advance

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244 regenerative medicine research. Members shall serve for a term of four 245 years, except that three members first appointed by the chief executive 246 officer of Connecticut Innovations, Incorporated, shall serve for a term 247 of two years. No member may serve for more than two consecutive 248 four-year terms and no member may serve concurrently on the 249 Regenerative Medicine Research Advisory Committee established 250 pursuant to section 32-41ll. Any member who fails to attend three 251 consecutive meetings or who fails to attend fifty per cent of all 252 meetings held during any calendar year shall be deemed to have 253 resigned from said peer review committee.

- (b) All members shall be deemed public officials and shall adhere to the code of ethics for public officials set forth in chapter 10. No member shall participate in the affairs of the committee with respect to the review or consideration of any grant-in-aid application filed by such member or by any eligible institution in which such member has a financial interest, or with which such member engages in any business, employment, transaction or professional activity.]
- 261 (a) The Regenerative Medicine Research Advisory Committee 262 established pursuant to section 32-41ll, as amended by this act, shall 263 select an independent panel of professional peer reviewers who shall: 264 (1) Have demonstrated knowledge and understanding of the ethical 265 and medical implications of regenerative medicine research or related 266 research fields, including, but not limited to, embryology, genetics or 267 cellular biology, (2) have practical research experience in regenerative 268 medicine research or related research fields, including, but not limited 269 to, embryology, genetics or cellular biology, and (3) work to advance 270 regenerative medicine research.
  - [(c)] (b) Prior to the awarding of any [grants-in-aid] <u>financial</u> <u>assistance</u> for regenerative medicine research pursuant to section 32-41kk, <u>as amended by this act</u>, [the Regenerative Medicine Research Peer Review Committee] <u>said peer reviewers</u> shall review all applications submitted by eligible institutions for such [grants-in-aid] <u>financial assistance</u> and make recommendations to the Regenerative

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277 Medicine Research Advisory Committee established pursuant to

- section 32-41*ll*, as amended by this act, with respect to the ethical and
- 279 scientific merit of each application.
- 280 [(d)] (c) [Members of the Regenerative Medicine Research Peer
- 281 Review Committee] Said peer reviewers may receive compensation
- 282 from Connecticut Innovations, Incorporated, for reviewing grant-in-
- 283 aid applications submitted by eligible institutions. The rate of
- 284 compensation shall be established by the board of directors of
- 285 Connecticut Innovations, Incorporated.
- [(e)] (d) The Regenerative Medicine Research [Peer Review
- 287 Committee] Advisory Committee, in consultation with said peer
- 288 <u>reviewers</u>, shall establish guidelines for the rating and scoring of such
- applications.
- [(f) All members of said peer review committee] (e) All said peer
- 291 <u>reviewers</u> shall become and remain fully cognizant of the National
- 292 Academies' Guidelines for Human Embryonic Stem Cell Research, as
- 293 amended from time to time, and shall utilize said guidelines to
- 294 evaluate each grant-in-aid application.
- Sec. 5. Section 32-41aa of the general statutes is repealed and the
- 296 following is substituted in lieu thereof (*Effective from passage*):
- 297 For the purpose of this section and sections 32-41bb to 32-41dd,
- 298 inclusive:
- 299 (1) "Administrator" means Connecticut Innovations, Incorporated,
- 300 in its capacity as administrator of the Connecticut Bioscience
- 301 Innovation Fund established pursuant to section 32-41cc.
- 302 (2) "Advisory committee" means the Bioscience Innovation
- 303 Advisory Committee established pursuant to section 32-41bb.
- 304 (3) "Early-stage business" means a business that has been in
- operation for not more than [three] seven years and is developing or
- 306 testing a product or service that is (A) not yet available for commercial

release, or (B) commercially available in a limited manner, including, but not limited to, market testing of prototypes and clinical trials that have not begun phase II evaluation.

- 310 (4) "Eligible recipient" means a duly accredited college or university, 311 a nonprofit corporation or a for-profit start-up or early-stage business.
- 312 (5) "Financial assistance" means any and all forms of grants, 313 extensions of credit, loans or loan guarantees, equity investments or 314 other forms of financing.
- (6) "Return on investment" means any and all forms of principal or interest payments, guarantee fees, returns on equity investments, royalties, options, warrants and debentures and all other forms of remuneration to the administrator in return for any financial assistance offered or provided.
- 320 (7) "Phase II evaluation" means a phase II clinical trial conducted 321 under the auspices of an independent peer-reviewed protocol that has 322 been reviewed and approved by one of the National Institutes of 323 Health or the federal Food and Drug Administration.
  - Sec. 6. (NEW) (Effective July 1, 2015) (a) Effective July 1, 2015, (1) the Business Environmental Clean-Up Revolving Loan Fund established under section 32-23z of the general statutes and in effect on June 30, 2015, and (2) the Environmental Assistance Revolving Loan Fund established under section 32-23qq of the general statutes and in effect on June 30, 2015, shall be combined with and become part of the Connecticut Growth Fund established under section 32-23v of the general statutes and in effect on June 30, 2015, provided all subfunds established under section 32-23qq of the general statutes shall become subfunds within the Connecticut Growth Fund. As of July 1, 2015, cash, notes, receivables and all other assets, liabilities, appropriations, authorizations, allocations and attributes then pertaining to the Business Environmental Clean-Up Revolving Loan Fund and the Environmental Assistance Revolving Loan Fund shall be transferred to the Connecticut Growth Fund. All loans, guarantees and lines of credit

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outstanding under sections 32-23z and 32-23qq of the general statutes on June 30, 2015, shall be treated as having been made, committed or extended from the Connecticut Growth Fund established under section 32-23v of the general statutes, and all payments received by the corporation on account thereof shall be credited or deposited to the Connecticut Growth Fund.

(b) On and after July 1, 2015, in addition to, and not in limitation of, the powers of the corporation in making loans from the Connecticut Growth Fund to eligible borrowers under section 32-23v of the general statutes, the corporation may make loans from the Connecticut Growth Fund, in the manner therein provided, to any person for any purpose as would have been permitted by section 32-23z or 32-23qq of the general statutes if made from the Business Environmental Clean-Up Revolving Loan Fund or the Environmental Assistance Revolving Loan Fund, respectively.

(c) All applications for loans under sections 32-23z and 32-23qq of the general statutes pending on June 30, 2015, and authorized on or after July 1, 2015, shall be funded from the Connecticut Growth Fund established under section 32-23v of the general statutes.

This act shall take effect as follows and shall amend the following sections:			
Section 1	July 1, 2015	32-41jj(a)	
Sec. 2	July 1, 2015	32-41kk	
Sec. 3	July 1, 2015	32-41 <i>ll</i>	
Sec. 4	July 1, 2015	32-41mm	
Sec. 5	from passage	32-41aa	
Sec. 6	July 1, 2015	New section	

CE Joint Favorable Subst.

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The following Fiscal Impact Statement and Bill Analysis are prepared for the benefit of the members of the General Assembly, solely for purposes of information, summarization and explanation and do not represent the intent of the General Assembly or either chamber thereof for any purpose. In general, fiscal impacts are based upon a variety of informational sources, including the analyst's professional knowledge. Whenever applicable, agency data is consulted as part of the analysis, however final products do not necessarily reflect an assessment from any specific department.

# **OFA Fiscal Note**

# State Impact:

Agency Affected	Fund-Effect	FY 16 \$	FY 17 \$
CT Innovations Inc. (quasi-public)	Various - Savings	See Below	See Below
Treasurer, Debt Serv.	GF - Potential	See Below	See Below
	Acceleration of		
	Debt Service		
	Costs		

# Municipal Impact: None

# Explanation

The bill makes various changes to programs administered by Connecticut Innovations Incorporated (CI). The impacts are described below.

Sections 1 – 4 make various changes to the Regenerative Medicine Research Fund (RMRF). The bill expands the type of financial assistance that may be provided under the RMRF to include loans, loan guarantees, equity investments, and other forms of financing. The law currently only allows grants to be provided through the RMRF. This will allow CI to (1) provide financing through the program to other businesses where such financing would be more appropriate and (2) receive loan payments and returns on investment which can be reused for other projects.

The RMRF is capitalized by General Obligation (GO) Bond funds. Future General Fund debt service costs may be incurred sooner under the bill to the degree that the bill causes authorized GO bond funds to be expended more rapidly than they otherwise would have been. However, loan repayments and returns on investments may offset any

potential need for recapitalization by GO bonds in future years. PA 14-98 provides \$10 million in GO bond authorizations for the RMRF in each of FY 16 – 19.

**Section 4** results in a savings of \$200,000 annually to CI by modifying the peer review process from a five member peer review committee to a panel of professional peer reviewers.

Currently CI incurs a total annual cost of approximately \$400,000 to review applications. The five member committee reviews applications, as statutorily required, at an annual cost of \$200,000. The bill eliminates the first five member committee and thus results in a savings of \$200,000.

CI also currently utilizes an out of state peer review service in order to access expert opinion that may not be available on the five person committee.<sup>1</sup> This secondary peer review panel costs approximately \$200,000 annually. CI would continue this review process as it meets the criteria for review as defined by the bill.

CI receives 100 to 120 applications per year for the RMRF.

**Section 5** modifies the Connecticut Bioscience Innovation Fund by extending eligibility for financial assistance to businesses operating between three and seven years. This may increase spending under the program to the extent businesses are deemed eligible under the bill.

Section 5 also restricts eligibility for financial assistance to businesses that have not yet begun phase II evaluations. This may decrease spending under the program to the extent businesses are ineligible for funding under the bill.

The net impact may be either a cost or a savings dependent upon the number of businesses that would qualify for funding as a result of the bill. The CBIF is capitalized by GO bond funds. The bond authorization for FY 15 – 16 is \$15 million and for FY 17 – 22 is \$25

<sup>&</sup>lt;sup>1</sup> An example is the American Association for the Advancement of Science (AAAS).

million.

**Section 6** consolidates the Business Environmental Clean-up Revolving Loan Fund and the Environmental Assistance Revolving Loan Fund ("funds") with the Connecticut Growth Fund. The bill transfers all assets of the funds into the Connecticut Growth Fund and permits CI to make loans for any purpose as would have been permitted under the funds. There is no programmatic change to the transfer and therefore no fiscal impact.

### The Out Years

The annualized ongoing fiscal impact identified above would continue into the future subject to inflation.

# OLR Bill Analysis sSB 957

AN ACT CONCERNING REVISIONS TO THE REGENERATIVE MEDICINE RESEARCH FUND AND THE CONNECTICUT BIOSCIENCE INNOVATION FUND, AND THE CONSOLIDATION OF CERTAIN FUNDS OF CONNECTICUT INNOVATIONS, INCORPORATED.

#### SUMMARY:

This bill makes several programmatic and administrative changes to Connecticut Innovations, Incorporated (CI) programs. It:

- 1. allows CI to award additional forms of financing from the Regenerative Medicine Research Fund (RMRF);
- 2. replaces the Regenerative Medicine Research Peer Review Committee with an independent panel of professional peer reviewers to review financial assistance applications;
- 3. expands eligibility for financial assistance from the Bioscience Innovation Fund to include businesses operating for three to seven years;
- 4. limits Bioscience Innovation Fund eligibility to businesses in certain clinical trial phases; and
- 5. folds two CI funds into the Connecticut Growth Fund.

EFFECTIVE DATE: July 1, 2015, except for provisions regarding the Bioscience Innovation Fund, which are effective upon passage.

# REGENERATIVE MEDICINE RESEARCH FUND

# Additional Financing

Under current law, CI may only award grants to eligible entities (i.e., businesses, nonprofits, academic institutions, and hospitals) from

the RMRF. The bill allows it to also provide loans, loan guarantees, equity investments, or other forms of financing from RMRF and makes conforming changes.

#### Peer Review

The bill modifies the peer review process for applications for financial assistance from the RMRF. Current law requires a five-member Regenerative Medicine Research Peer Review Committee ("peer review committee") to review all assistance applications. Peer review committee members are appointed by CI's CEO, serve no more than two four-year terms, and must adhere to conflict of interest provisions and the public officials' code of ethics.

The bill eliminates the peer review committee and requires RMRF's advisory committee, which oversees the RMRF, to select an independent panel of professional peer reviewers ("peer reviewers") to review assistance applications. It also requires RMRF's advisory committee to establish, in consultation with the peer reviewers, rating and scoring guidelines for all applications. Current law requires the peer review committee to do this.

The bill also applies to peer reviewers several provisions that apply to the peer review committee under current law. It:

- 1. requires that peer reviewers (a) understand the medical and ethical implications of, and have practical research experience in, regenerative medicine or related research fields, including embryology, genetics, or cellular biology and (b) work to advance regenerative medicine research;
- 2. requires peer reviewers to review all financial assistance applications and make recommendations to the RMRF's advisory committee regarding the applications' ethical and scientific merit;
- 3. allows CI to pay peer reviewers for reviewing applications at a rate it establishes; and

4. requires peer reviewers to be cognizant of the National Academies' Guidelines for Human Embryonic Stem Cell Research and use them to evaluate assistance applications.

The bill does not extend to peer reviewers the ethics and conflict of interest provisions that apply to the peer review committee under current law.

# **BIOSCIENCE INNOVATION FUND**

The bill extends eligibility for financial assistance from the Bioscience Innovation Fund to businesses operating between three to seven years by changing the definition of "early-stage business." Under current law, only businesses operating for three years or fewer are considered "early-stage" and thus eligible for the assistance. The bill also restricts eligibility for financial assistance to those early-stage businesses that have not begun phase II evaluation clinical trials, which are those conducted under an independent peer-reviewed protocol that has been reviewed and approved by the National Institutes of Health or the Food and Drug Administration. By law, an eligible early-stage business must be testing a product or service that is not commercially released or is commercially available in a limited manner.

# **CONSOLIDATION OF CERTAIN FUNDS**

Effective July 1, 2015, the bill folds the Business Environmental Clean-Up Revolving Loan Fund and the Environmental Assistance Revolving Loan Fund ("funds") into the Connecticut Growth Fund (see BACKGROUND). In doing so, it:

- 1. makes the subfunds of the Environmental Assistance Revolving Loan Fund subfunds of the Growth Fund;
- 2. transfers the funds' cash, notes, receivables, and all other assets, liabilities, appropriations, authorizations, and attributes to the Growth Fund;
- 3. treats any of the funds' outstanding loans, guarantees, and lines

of credit as having been made from the Growth Fund and credits any payments received for them to Growth Fund;

- 4. permits CI to make loans from the Growth Fund for any purpose currently allowed from the funds; and
- 5. requires loans from the funds that are pending before and authorized after July 1, 2015 to be made from the Growth Fund.

#### **BACKGROUND**

# Business Environmental Clean-Up Revolving Loan Fund

CI may provide loans from the Business Environmental Clean-Up Revolving Loan Fund to businesses for (1) converting vehicles to burn alternative fuels or (2) containing, removing, or mitigating spills or other hazards involving oil, petroleum, or other chemicals.

# Environmental Assistance Revolving Loan Fund

From the Environmental Assistance Revolving Loan Fund, CI may provide grants, loans, loan guarantees, and lines of credit to businesses or municipalities for pollution prevention activities.

### Connecticut Growth Fund

CI's Connecticut Growth Fund provides capital to businesses important to the state's economic base for a number of purposes, including equipment purchases and working capital.

#### COMMITTEE ACTION

Commerce Committee

Joint Favorable Substitute Yea 21 Nay 0 (03/10/2015)